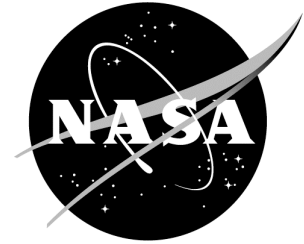


# NewsRelease

National Aeronautics and  
Space Administration

**Langley Research Center**  
Hampton, Virginia 23681-2199



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## **NASA LANGLEY FORECAST**

### **World class institute, understanding climate, help for air travelers**

**NASA selects partner to lead innovative research institute.** A consortium of seven non-profit organizations and universities has been selected to create a world-class institute for cutting edge aerospace and atmospheric research. The National Institute of Aerospace (NIA), to be located adjacent to NASA Langley in Hampton, Va., will develop new technologies for the nation and help inspire the next generation of scientists and engineers. The consortium, lead by the National Institute of Aerospace Associates (NIAA), is made up of the American Institute of Aeronautics and Astronautics Foundation, Reston, Va.; Virginia Polytechnic Institute and State University, Blacksburg, Va.; University of Virginia, Charlottesville, Va.; University of Maryland, College Park, Md.; North Carolina State University, Raleigh, N.C.; North Carolina Agricultural and Technical State University, Greensboro, N.C.; and Georgia Institute of Technology, Atlanta. Interviews are available upon request.

For information, call Kathy Barnstorff at 757-864-9886 or email [k.a.barnstorff@larc.nasa.gov](mailto:k.a.barnstorff@larc.nasa.gov)

**Innovative 'FIRST' promises new tool for climate research.** NASA Langley has teamed with Utah State University to develop a specialized heat sensor that may help scientists better understand climate variations. The device, intended for remote sensing from future satellites, will measure long wave radiation emitted from Earth, especially from water vapor and clouds. The resulting data set is expected to add important new information to existing climate change models. Langley is working with the university's Space Dynamics Laboratory in North Logan, Utah, on the sensor, called FIRST, for Far-InfraRed Spectroscopy of the Troposphere. The sensor will be tested in 2005 on a stratospheric balloon, 10 times the size of a normal hot air balloon, at more than 100,000 feet altitude. The project is part of the NASA Instrument Incubator Program managed by the NASA Earth Science Technology Office.

For more information, call Chris Rink at 757-864-6786 or email [c.p.rink@larc.nasa.gov](mailto:c.p.rink@larc.nasa.gov)

**Award-winning distance learning programs resume.** Three highly-acclaimed NASA Langley distance learning programs have announced their 2002-2003 program schedules. The programs, broadcast on TV and available on line, have won nine regional Emmy awards. They are designed to integrate and enhance the teaching of math, science and technology from the grade school level to lifelong learners. The programs can be viewed at no cost on PBS-member stations and NASA TV. For topics and air dates, see NASA SCIENCE Files (grades 3-5): <http://scifiles.larc.nasa.gov>, NASA Connect (grades 4-8): <http://connect.larc.nasa.gov>, Destination Tomorrow (educators, parents and other adults): [http://destination.larc.nasa.gov/index\\_exp.html](http://destination.larc.nasa.gov/index_exp.html).

For more information, call Kimberly W. Land at 757-864-9885 or email [k.w.land@larc.nasa.gov](mailto:k.w.land@larc.nasa.gov)

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**NASA flying lab tests technologies for reducing air traffic delays.** NASA Langley's Boeing 757, a virtual flying laboratory for the study of next-generation aviation technologies, has completed a successful series of test flights at Chicago's O'Hare International Airport. The jet and its flight researchers tested an airborne computer system for airliners that could help decrease air traffic delays and help reduce air traffic controllers' work loads. Called Advanced Terminal Area Approach Spacing (ATAAS), the system is designed to give pilots automatic speed information and guidance so that planes can be precisely spaced on their final approach into the airport. The flights at O'Hare were seen as a demanding "real world" test of the system. Interviews and video and photographs taken during the deployment are available upon request. For information, call Kathy Barnstorff at 757-864-9886 or email [k.a.barnstorff@larc.nasa.gov](mailto:k.a.barnstorff@larc.nasa.gov)

***Speaker series:***

Note: Reporters are invited to preview talks at afternoon presentations to employees at NASA Langley. The public is invited to evening Sigma Series talks at the Virginia Air & Space Center, Hampton.

**Oct. 1 – How emergency response is changing due to Sept. 11.**

*Presented by Scott Solomon, director of hazardous materials training, International Association of Fire Fighters.*

When it comes to the nation's emergency preparedness, everything has changed since Sept. 11, from public expectations to training to new technologies.

For more information, call Kimberly W. Land at 757-864-9885 or email [k.w.land@larc.nasa.gov](mailto:k.w.land@larc.nasa.gov)

**Nov. 5 – What we can learn from the aerodynamics of animals.**

*Presented by Professor Geoffrey Spedding, Departments of Aerospace & Mechanical Engineering, University of Southern California.*

The flight of birds has long been the source of inspiration for the earthbound human. Some birds appear to possess an array of desirable or necessary characteristics for successful piloted air vehicle development.

For more information, call Kimberly W. Land at 757-864-9885 or email [k.w.land@larc.nasa.gov](mailto:k.w.land@larc.nasa.gov)

**Dec. 17 – From Kitty Hawk to the stars.**

*Presented by Gentry Lee, NASA's Jet Propulsion Laboratory, Pasadena, California.*

One hundred years ago, Orville and Wilbur Wright set out to solve the problems of flight, and their success changed America forever. In more recent years, flight has taken on a new meaning and focus. Now we're "reaching" for Earth's outer limits.

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